

Domino effect: Each violent death in turn affects additional individuals and results in multiple economic losses.



Utilizing WVDRS data to drive prevention

System offers insight into circumstances of violent deaths in Wisconsin

The Wisconsin Violent Death Reporting System, or WVDRS, is a statewide surveillance system that collects information on all suicides, homicides, unintentional firearm deaths, deaths due to legal intervention, and deaths of undetermined intent that occur in Wisconsin. WVDRS offers more detailed information on these deaths than is available through death certificates.

The system's richest resource may be the availability of

circumstance information. This key data element provides insight into the individual and population level activities that may be driving the occurrence of these violent deaths, and consequently offers avenues for prevention of future deaths. The first step toward this prevention is to share these data so community members and organizations, businesses, public health professional and researchers understand the burden of violent deaths here in Wisconsin.

In an effort to present these data in a more timely and cost-efficient fashion, we are transitioning from a printed annual

report to an electronic newsletter. Each newsletter will highlight different issues discovered through surveillance using the WVDRS.

in this issue:

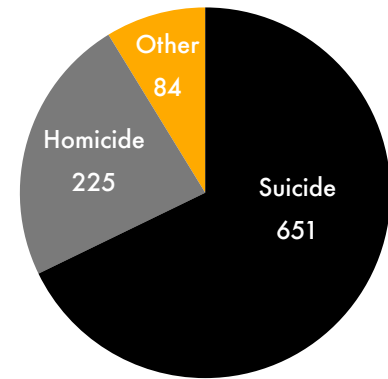
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Wisconsin violent deaths, 2005

TABLE 1. Counts and rates of violent deaths in Wisconsin, 2005.

	Suicide		Homicide		Other	
	N	Rate	N	Rate	N	Rate
Total	651	11.7	225	4.0	84	1.5
Male	526	19.0	179	6.5	54	2.0
Female	125	4.4	45	1.6	30	1.1
% firearm	45%		63%		19%	
% at home	71%		45%		64%	



Comparison between violent deaths, 2004 and 2005

Homicides increased over 40% between 2004 and 2005

While suicides remained the leading cause of violent death in Wisconsin residents (Table 1), there were 68 more homicides in 2005 than in 2004, which represented a 43% increase (Table 2).

It is important to note that this may not represent a trend of increasing homicides in the state. However, continued monitoring of homicide, along with the circumstances surrounding these deaths, is warranted.

Milwaukee County suffered 46 more homicide deaths in 2005 as compared to 2004. Bordering

TABLE 2. Percent change of violent death counts and rates, 2004 and 2005.

	Suicide		Homicide		Other	
	N	Rate	N	Rate	N	Rate
2004	647	11.7	157	2.8	76	1.4
2005	651	11.7	225	4.0	84	1.5
% change	+0.6%	-	+43%	+43%	+11%	+7%

Waukesha County also saw an increase in homicide deaths in the two years, jumping from 2 in 2004 to 9 in 2005. Racine County contributed 9 additional homicide deaths in 2005 as compared to 2004 (6 to 15).

The percentage of homicides in which a firearm was used to kill the victim did not change over the two

years. In fact, a firearm was the cause of homicide death in 63% of the cases in both 2004 and 2005.

Between 1999 and 2003, homicides averaged 195 per year. Compared to this, 2004 represented a lower than average year for homicide deaths, while 2005 represented a higher than average year for homicide deaths.

What is included in the "other" category?

- Unintentional firearm-self-inflicted
- Unintentional firearm-inflicted by other person
- Legal intervention
- Undetermined intent

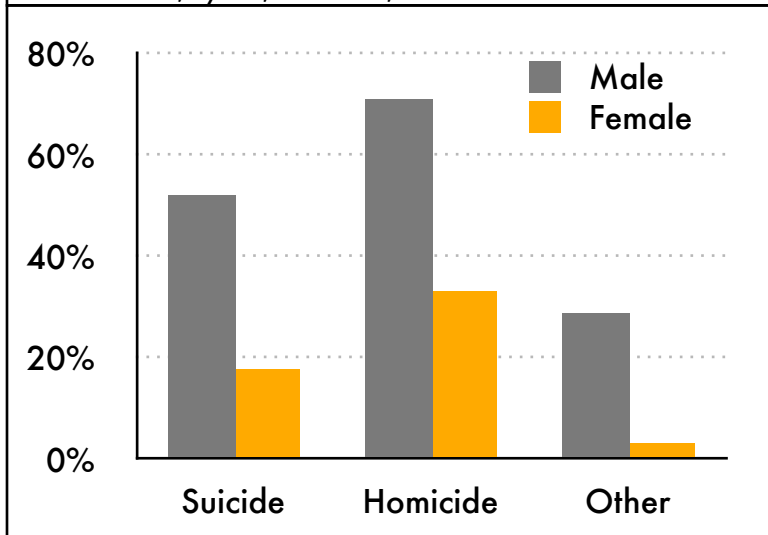
Understanding deaths of undetermined intent

Deaths classified as "undetermined intent" in the WYDRS are those for which the information gathered is not compelling enough to determine the intent of the death. Poisoning was the means of death in 58% of these cases.

In many states in the U.S., poisoning deaths are improperly or insufficiently coded. Even when properly coded, however, it can be difficult to determine if an individual intentionally overdosed on a poison, such as alcohol.

Firearms: the most common weapon of choice in violent deaths

FIGURE 1. Percentage of violent deaths in which a firearm was the means of death, by sex, Wisconsin, 2005.



Firearms were the means of violent death in nearly 50% of cases

Use of a firearm to complete an act of suicide or homicide varied between males and females. Figure 1 describes the percentage of males and female violent death victims who were killed by a firearm

Males were much more likely to use a firearm to complete an act of suicide as compared to females. The most common means of death for females who completed suicide was poisoning. In acts of homicide, males were killed by a firearm in 71% of the cases. Female homicide victims were killed by a variety of means, including firearms, sharp instruments, and strangulation.

Suicide and homicide by age, 2005

Those 15-44 years of age experience greatest burden of violent death

- During 2005, the highest rate of suicide occurred in the 35-44 year age group, with 17 deaths per 100,000 population (Table 3). This age group also experienced the highest number of total deaths from suicide (Figure 2).
- Suicides in youth and young adults are particularly concerning because they contribute so many years of potential life lost (YPLL), which is a calculation of the years of life lost due to death before the age of 75 years.
- Suicides that occurred in 2005 to those younger than 75 years of age resulted in over 20,000 YPLL.
- The highest rate of homicide occurred in the 15-24 year age group (Table 3). This age group experienced 9 deaths per 100,000 population in 2005.
- Homicides that occurred in 2005 to those younger than 75 years of age resulted in over 10,000 YPLL.
- As a comparison, each violent death to those younger than 75 years of age in Wisconsin in 2005 contributed an average of 37 YPLL while each heart disease death to those younger than 75 years of age contributed an average of 13 YPLL.

*Rate calculated from count of less than 20; see technical notes on page 4.

FIGURE 2. Number of suicide and homicide deaths, by age, Wisconsin, 2005.

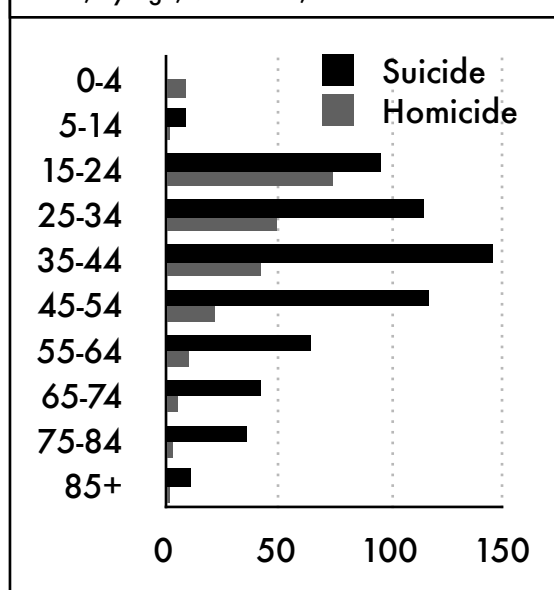


TABLE 3. Rates of violent death, per 100,000 population, selected age groups, 2005.

Age group	Suicide		Homicide	
	N	Rate	N	Rate
15-24	96	12	74	9.0
25-34	115	16	50	7.0
35-44	145	17	42	5
45-54	117	14	23	3
55-64	65	11	11	2*
65-74	43	12	6	2*
75-84	37	14	<5	-

WISCONSIN VIOLENT DEATH REPORTING SYSTEM

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Upcoming issues

Murder-suicide in Wisconsin

Murder-suicide cases make headlines, but how many actually occur in Wisconsin? We'll also look at the relationship between those involved in murder-suicide cases.

circumstance behind a violent death.

Predominant suicide circumstances

Suicide is the leading cause of violent death in Wisconsin. We'll explore the circumstances surrounding these deaths.

Role of alcohol and other drugs in violent deaths

Alcohol and other drugs can contribute to violent deaths in several ways: as a means of suicide or homicide; as a catalyst to the completion of a violent act; and, as a

Relationships between homicide suspects and victims

Understanding relationships between homicide suspects and their victims is critical to directing prevention efforts.

METHODOLOGY

What is considered a violent death?

Violent death includes homicide, suicide, unintentional firearm death, death from legal intervention, death related to terrorism, and death from undetermined manner or intent.

How are deaths included in the WVDRS?

A violent death case is initiated through a death certificate. The WVDRS abstraction team enters this case into the system and collects information from additional sources, including the coroner/medical examiner report, police report, and crime lab, among others. The abstraction team attempts to get as much information as possible for each incident.

Technical notes

For confidentiality purposes, counts of injury events between 1-4 are indicated with <5 rather than the actual number. In these instances, a corresponding rate is not calculated.

Rates based on numbers of 20 or less are considered unstable due to random chance factors and should be interpreted with caution. Rates calculated from a corresponding injury count between 5-20 are indicated with an asterisk (*).

WISCONSIN VIOLENT DEATH REPORTING SYSTEM

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